

Abstract of the invention

A storage system having disk drives, a first and a second cache memory for temporarily storing data sent from a host system so as to be written in the disk drives and a duplicate of the data, a first FIFO buffer for temporality storing the duplicate data in order to transfer the duplicate data from the first cache memory to the second cache memory, and a second FIFO buffer for temporality storing the duplicate data in order to transfer the duplicate data from the second cache memory to the first cache memory. In the case where the data sent from the host system so as to be written in the disk drives are temporarily stored in the first cache memory and the duplicate of the data is stored in the second cache memory, completions of the data writing are reported to the host system at the time point when the data and the duplicate data are stored in the fist cache memory and the second cache memory. After the report of completions of data writing to the host system, the duplicate data stored in the FIFO buffer are stored in the cache memory.